WHAT IS CLAIMED IS:

1. In a communications network carrying data packet traffic, a method for managing a connection context database comprising the steps of:

a. obtaining connection information defining a connection;

b. responsive to a search in the context database for said connection, updating a network load sensing mechanism related to said connection; and

c. using said network load sensing mechanism to manage the connection context database;

whereby the method provides a dynamic database management that significantly accelerates the processing time of packets received by a host over a network.

2. The method of claim 1, wherein said step of obtaining connection information includes receiving a packet associated with said connection and extracting said connection information from said packet.

3. The method of claim 2, wherein said receiving a packet includes receiving a TCP/IP packet.

4. The method of claim 3, wherein said connection information includes a source IP address, a destination IP address, a source TCP port and a destination TCP port.

5. The method of claim 2, wherein said step of updating a network load sensing mechanism related to said connection includes starting a connection dedicated delete timer for each said associated packet of said connection, and wherein said step of using said network load sensing mechanism to manage the connection context database includes deleting said connection from the context database after an expiration event using said dedicated connection timer.

6. The method of claim 5, wherein said starting said connection delete timer includes starting said delete timer for a predefined time period for each said associated packet belonging to said connection, and wherein said deleting said connection after an

expiration event includes deleting said connection from the database when said delete timer stops.

7. The method of claim 5, wherein said starting said connection delete timer for each said associated packet belonging to said connection includes adding a new entry for said connection to the context database if said connection is not found in the context database.

8. The method of claim 5, wherein said starting said connection delete timer for each said associated packet belonging to said connection includes starting said delete timer if said connection is found in the context database.

9. A method for dynamically managing a connection context database in a communications network comprising the steps of:

a. receiving a packet in an aggregation unit;

b. extracting connection information from said packet;

c. searching the context database for said connection, and if said connection is not found;

d. adding a new connection to the context database;

e. starting a timer for said new connection, said timer dedicated to said new connection and configured to stop after a determined time period; and

f. deleting said new connection from the context database when said timer stops after said determined time period.

10. The method of claim 9, wherein said step of receiving a packet includes receiving a TCP/IP packet;

11. The method of claim 10, wherein said connection information includes a source IP address, a destination IP address, a source TCP port and a destination TCP port.

12. A method for managing a connection context database in a communications network comprising the steps of:

a. receiving a packet in an aggregation unit;

b. extracting connection information from said packet;

c. searching the context database for said connection, and, if said connection is found;

d. starting a timer for said connection, said timer dedicated to said connection and configured to stop after a determined time period; and

e. deleting said connection from the context database when said timer stops after said determined time period.

13. The method of claim 12, wherein said step of receiving a packet includes receiving a TCP/IP packet;

14. The method of claim 13, wherein said connection information includes a source IP address, a destination IP address, a source TCP port and a destination TCP port.

15. A method for accelerating the processing time of TCP/IP packets received by a host over a network, each packet carrying connection information, the method comprising the steps of:

a. providing a dynamic context database that includes a plurality of connections;

b. for each received packet, updating a corresponding connection of said packet in said dynamic context database and updating a network load sensing mechanism;

c. aggregating at least two packets belonging to a said updated connection in said context database to form an aggregated packet; and

d. transmitting said aggregated packet to the host.

16. The method of claim 15, further comprising using said network load sensing mechanism to allocate dynamically priorities to said connections, from a highest priority to a most active connection to a lowest priority to an inactive connection.

17. The method of claim 15, wherein the load sensing mechanism is implemented as a connection delete timer dedicated to each said connection, wherein said step of updating a load sensing mechanism includes starting said connection delete timer for a

predefined time period for each packet belonging to said corresponding connection, and wherein said step of deleting a connection from said database upon a command of said load sensing mechanism includes deleting said corresponding connection from said context database when said delete timer stops.

18. The method of claim 17, wherein said step of updating further includes searching said context database for said corresponding connection and, if said corresponding connection is not found, adding a new connection and starting said connection delete timer.

19. The method of claim 17, wherein said step of updating further includes searching context database for said corresponding connection and, if said corresponding connection is found, starting said connection delete timer.

20. The method of claim 16, wherein said step of deleting said connection from said database upon a command of said load sensing mechanism includes deleting said inactive connection.

21. A system for accelerating the processing time of TCP/IP packets received by a host over a network, each packet carrying connection information, the system comprising

a. a dynamic context database used to store the context of a plurality of connections;

b. a network load sensing mechanism operative to manage said dynamic database by updating and deleting said connections; and

c. an aggregation mechanism operative to aggregate at least two packets belonging to a same said connection in said context database into an aggregated packet that can be further transmitted to the network.

22. The system of claim 21, wherein said dynamic database includes, for each said connection, a timer that operates in coordination with said network sensing mechanism to perform said deleting.

23. The system of claim 21, wherein said network load sensing mechanism operativeness to manage said dynamic database by updating and deleting said connections is provided by a delete timer dedicated per connection that deletes a connection from the database after a predefined connection inactivity time.